

## WORK-BASED TRAINING: EXPERIENCES OF STUDENT INTERNS

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**Abstract:** Work-based training is studied via qualitative interviews with 25 students in four vocational training programs, who were met first in school, then in the workplace. Following a description of the internship periods undergone by the students, the process of work-based training is analyzed. The progression of internships and learnings, as described, demonstrates that the activities assigned to the students have enabled them to increase their knowledge and begin their integration into the labor market. The study also examines the students' development at the hands of their mentor and other employees, highlighting the difficulties they encounter.

### INTRODUCTION

In Quebec, as in a number of other jurisdictions, work-based training occupies an increasingly important place in the education of students pursuing a vocational or technical diploma. Here we present an analysis of the experiences of students involved in training administered alternately at school and in the workplace. Following an overview of the problematic and the frame of reference guiding our work, we describe the methodology we employed, as well as the characteristics of the students we met. The alternance training model, as it is applied in Quebec, and the characteristics of students' internships are also identified. We then proceed to an analysis of the work-based training process, separate from the students' testimonials. Finally, we examine the training relations that have been woven among the student, his or her mentor in the workplace, the other employees and the teacher at school. We conclude by highlighting some of the difficulties encountered by the students.

### 1. PROBLEM STATEMENT AND THEORETICAL FRAMEWORK

The necessity of better links between academic education and demands for qualified labor has prompted experimentation with various forms of school-workplace partnership in vocational education. These partnerships have allowed for the delivery of *alternance training*, *cooperative education* and *work-based learning*. Studies into such work-based training experiments have mainly examined the perspectives of teachers (Gérard, 1999) or workplace mentors (Agulhon & Lechaux, 1996; Geslin & Liétard, 1993). Having ourselves already analyzed the experiences of school administrators (Hardy & Parent, 1998) and of mentors (Hardy & Parent, 1999b), as well as of teachers and mentors involved in supervising students (Hardy & Parent, 1999a), we now seek to understand the experiences of student interns involved in such vocational high-school education. This includes several internships, wherein the educational periods in the workplace are alternated with periods of vocational training dispensed in the school environment. Our research question is as follows: What are the characteristics of the learning process of students involved in alternance training or work-based learning?

The chosen framework of reference allows for the examination of students' views on their work-based training experience, as well as on their relations with their mentor in the workplace, the other employees and their teachers. This investigation is inspired mainly by the work of Evanciew & Rojewski (1999), Lechaux (1995) and Stasz & Kaganoff (1997), who studied the experiences of students involved in youth apprenticeship, alternance training or work-based learning programs. The present analysis also draws on the work of Grubb & Villeneuve (1995) and that of Lasonen (1999), wherein the authors investigate the advantages of work-based learning for students. Our analysis concentrates on the modes of actualization of students' work-based learning process, on students' self-evaluation with respect to difficulties encountered and learnings acquired in the workplace, as well as their workplace training relations with their mentor, the employees and their teachers.

## **2. METHODOLOGY**

This study involving the vocational training students is part of a research project into school-workplace collaboration in secondary education, wherein we utilize a case-study approach (Stake, 1995). The cases studied or the units of analysis in this research project are study programs. In the current analysis, we focus our attention on curricula involving alternating periods in the workplace. These specific programs are taught in three Vocational Training Centers located on the Island of Montreal. We analyze the viewpoints of 25 students, broken down as follows into one of four vocational high-school education programs<sup>1</sup>: Drafting (n=8), Modeling (n=7), Jewelry-Making (n=6) and Office Skills (n=4). Each of these 25 students granted us an initial interview of 30 minutes during the penultimate month of their school-based studies, and a second interview of 15 minutes during the second part of their last internship in the workplace. The recorded interviews were processed using NUD\*IST software.

## **3. CHARACTERISTICS OF THE STUDENTS**

Gender representation varies according to the study program. Two-fifths of the students are women (n=10) and three fifths are men (n=15); however, the women are enrolled in office skills (F, n=4) and jewelry-making (F, n=5), while the men are to be found in drafting (H, n=7) and modeling (H, n=7). A ten-year age gap separates the youngest from the oldest within the group, the average age being 28.3 years. The jewelry-making students are aged, on average, 23.2 years, whereas those in modeling are, on average, 33.3 years old. Between these two groups are the drafting students, with a mean age of 26.4, and the secretarial students, with a mean age of 30.5. The average age of these students is slightly above the provincial average for Quebec students. This figure can be attributed to educational policies in place since 1988, which integrate youths and adults in the same vocational classes, in order to offer a wider variety of programs and maximize returns on investments in equipment for workshop classes.

Prior education is relatively homogeneous in three of the four programs. At the time of their enrollment, four-fifths of the students (n=20) already possessed a diploma of general (n=17) or vocational (n=3) studies. The other fifth (n=5) had completed college (n=2) or university (n=1) studies, or held no diploma at all (n=2). More than a quarter of the students (n=6) had also

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<sup>1</sup> - Drafting prepares students for architectural trades; Modeling offers instruction in the manufacture or modification of wooden, plastic casting or reinforced plastic models, used in the fabrication of molds for metal or plastic casting; Jewelry-Making provides training in jewelry design and creation and Office Skills prepares student for secretarial work.

interrupted other college or technical studies. Half of these students were finishing studies in drafting (n=3). Over a third of these graduates (n=9/25 or 36%) had thus returned to pursue vocational high-school studies after having abandoned (n=6) or completed (n=3) college or university studies. As for work experience, the majority (n=24) had acquired it through full-time employment (n=19). The average duration of such full-time work was 5.61 years. The students in jewelry-making (1.63 years) and drafting (4.33 years) had significantly less work experience than those in modeling (8.5 years) and office skills (10 years).

#### **4. ALTERNANCE TRAINING MODEL AND INTERNSHIP CHARACTERISTICS**

Work-based alternance training is at once a pedagogical strategy and a method of organizing vocational education and training. The model applied in Quebec has been mainly inspired by that applied in France. It also shares similarities with the Co-operative Education, developed in the United States. This alternance training is characterized by the structured combination of periods of training in an educational establishment and internship periods in the workplace. Within this general framework, several different forms of alternance may be observed, wherein the number of internship periods may vary from two to four, and the total duration of these internships may range from seven to sixteen weeks. The integration of alternance training within a vocational program may be intended mainly to facilitate the acquisition in the workplace of competencies set by the curriculum, or to transfer competencies already acquired to a real-world setting, as well as to facilitate students' transition from learning to practicing their chosen occupation.

The application of the alternance training model varies as follows in the four programs studied: the jewelry-making and drafting programs offer four internships of four weeks each, or sixteen weeks of work-based training; the modeling program includes three internships lasting one, two and three weeks, respectively; and the office skills program integrates two four-week internships. The jewelry-making instructors benefit from an agreement with a major jewelry studio in Montreal that accepts the majority of students in this program. The students in this studio realize a project they developed in class. The students in the other programs are dispersed throughout various companies in their industrial sector, where they carry out tasks assigned to them by the accepting company. To these distinctions among the programs are added the particularities of the students themselves. In jewelry-making, 5 of the 6 students completed their internships in the workshop paired with their school, but the number of their respective internships varied from two to four (2 internships, n=2; 3 internships, n=1; 4 internships, n=2). This is largely attributable to the selection made by the instructors, who refer only the best students. The last student was refused by the target studio for security reasons, and was able to complete only one internship in a family-style studio. In drafting, the majority of students (n=5) completed all four scheduled internships with a single company (n=3) or with two or three different companies (n=2). The other students (n=3) completed only two internships with a single organization. In modeling, all the students completed their three internships with three different companies whereas, in the office skills program, all the students completed their two internships, but half (n=2) changed companies for the second one. The organization of work-based internship periods and their duration vary for each program studied. This multiplicity of approaches to applying workplace training has also been observed by Brochier, Froment & d'Iribarne (1990) in regard to alternance training in France, and by Stasz & Kaganoff (1997) in the context of work-based learning in the United States.

## **5. WORK-BASED TRAINING PROCESS**

Four steps are identified in the work-based training process: 1) preparation and progression of the internship; 2) self-evaluation of the internship; and 3) vocational plans.

### **5.1 Preparation and progression of the internships**

Preparation for the internship includes training received at school, and the search for an internship. The students in all four programs were satisfied with the preparation they received at school prior to their various internships. Nearly half of the students (n=12), however, expressed reservations, stressing the limits of their preparation, to which they attribute certain difficulties they encountered. They note in particular the differences between the tools or instruments they used at school and those that were available to them in the workplace. As for their internship search, the majority of students (n=18) were assisted by the school in securing all of their internships. Several students (n=14) also emphasized the personal initiative they took in approaching organizations.

The progression of each internship begins with the welcome into the organization and is followed by the student's engagement in the internship. During all their internships the vast majority of students (n=21) felt warmly received by the people in their internship environment. They particularly appreciated being invited to participate in the work of the company (n=8) and being able to benefit from the availability of personnel to obtain assistance (n=9). Whichever the internship in question, the tasks performed by the students were varied and corresponded to the job functions learned in school. Almost 7 in 10 students (n=17) further acknowledged that the work assigned to them either was more complex than what they done in school, or corresponded to tasks they had not yet learned. Nevertheless, one third of students (n=9) carried out their assigned tasks with ease, and several (n=7) emphasized the openness of company personnel vis-à-vis questions posed by the interns. These testimonials by the students confirm an earlier analysis wherein the mentors affirmed that they "direct the intern towards tasks that require participation in productive activity and the use of a variety machines and tools." (Hardy & Parent, 1999a, p. 12)

### **5.2 Self-evaluation of the internship**

In evaluating their internships, the students spoke of the difficulties they encountered and the learnings they acquired. With respect to difficulties, the majority of students (n=20) experienced negative aspects in one internship period. During their initial internships, they mainly noted a lack of cooperation from their mentor or company employees (n=7), or their assignment to relatively unstimulating tasks (n=3). In their final internship, they pointed instead to the challenge of overcoming the stress they felt as a result of the relatively complex tasks assigned to them (n=6).

With respect to the learnings acquired during their internships, the students emphasize the acquisition of practical knowledge (n=19), such as new techniques, methods of work, "tricks of the trade" or putting into practices what they had seen in school. They then underline their familiarization with norms relating to the dynamics of the labor market or their occupation (n=9), application to the work in order to meet set objectives (n=6), increased self-confidence (n=5), the development of communication and teamwork skills (n=3) and autonomy (n=3). The learning most often cited reflect the two main stated objectives of alternance training, namely, the acquisition or transfer of competencies set by the study program, and the progressive integration of the student towards practicing the chosen occupation.

### 5.3 Vocational plans

When the students are invited to specify their vocational plans, the majority (n=15) express a desire to work in the company where they completed their internship. The others hope to find employment in their field of study (n=5) or continue their studies to college-level studies (n=5). Over three-quarters of the students (n=21) consider their internships as a valuable means of transitioning towards future employment; indeed, four of the seven modeling students received offers of employment with the company where they completed their final internship. The students mainly explain the internship's integration-to-work role through workplace integration skills acquired during their internships (n=10), and through references to the internship space as a means of valorizing their training (n=9).

We see no real differences in the work-based training process of the four groups of students. The description of the progression of the internship and associated learnings clearly demonstrates that the activities assigned to the student allowed them to acquire knowledge and to transfer, in a real work situation, the competencies acquired at school, while simultaneously allowing them to begin their integration into the labor market. The students' testimony as to their vocational plans is also eloquent in favor of integration to work, in that the majority of students hope to continue working in the same company which accepted them as interns,

## 6. WORKPLACE TRAINING RELATIONS

Training relations in the workplace are a manifestation of the type of student training offered by the internship. The students were invited at two separate junctures to describe their relations with their mentor, the other employees and their teachers. In the first interview, at school, nearly three-quarters of the students (n=18) highlighted the assistance they received from their mentor. According to their reports, this support relationship took the form of an attitude of openness that put students at ease, attentiveness and responsiveness to questions, the imparting of "tips and tricks" and the communication of methods of work, as well as patient behavior in the face of challenges, encouragement, explanation and relevant advice. A minority of students limited themselves to describing their relations with their mentor as good or satisfactory for purposes of completing their internship (n=3), or complained of being left to their own devices and of not having received the necessary assistance during at least one of their internships (n=4). During the second interview, in the workplace, half of the students (n=13) continued to characterize their relationship with their mentor as supportive, while the other half (n=12) claimed to be merely satisfied with the guidance they received from their mentor. A third of these students (n=8) also regretted that their mentors were too busy with their own work to have time to sufficiently attend to their interns' needs.

The students' relations with the other employees appear complementary to those with their mentors, and borrow the same configuration. Nearly two-thirds of the students (n=16) qualify these relations as helpful and appreciate having thereby received supplementary training that fleshed out answers to their questions, put them at ease, etc. The other third of students considered their relations to be good or normal (n=5) or stated that they had little or no relations with other employees (n=4). The majority of students thus received almost as much training from other employees as from their mentor. The work environment as a whole became a source of training and the students were able to benefit from more consistent guidance.

In alternance training, a teacher or internship coordinator is intended to visit the student during the internship. During the first interview, some of the students (n=11) had benefited from all of the planned visits, and some (n=11) had not received a visit from the teacher during one of their internships. Almost half (n=11) found these visits helpful, as the instructor spoke with them about

their work, offered them some advice, encouraged them and boosted their self-confidence. One quarter of the students (n=6) considered these visits satisfactory and another quarter (n=6) were indifferent to the visits. A minority of students (n=7) expressed several misgivings (n=15) which mainly centered on the bad mood or lack of patience of their teachers (n=4), their lack of readiness to provide assistance (n=3), an overbearing manner that left insufficient room for autonomy (n=3) and occasionally difficult communications (n=3). Seven students, however, reproached their teachers for being insufficiently available, keeping visits too short or not coming to meet with them.

Overall, the students reported having very supportive relations around their work-based training experience. They particularly appreciated the training provided by their mentor and other employees of the host company. They are, however, more severe vis-à-vis their teacher, whom they reproached, among other things, for a lack of availability and patience.

## CONCLUSION

Since any training experience can be improved, we have, by way of conclusion, grouped together the criticisms expressed by students about the various aspects of their work-based training. The negative aspects highlighted by students relate to the training they received from their mentor and the contribution of the teacher who visited them during the internship. Some students deplore the lack of guidance received from their mentor during the initial internships and the understimulating tasks assigned to them. Would the company have greater difficulty integrating students who were less advanced in their study program? During the final internship, the students regret instead that their mentor has too little available time or is too busy. This fact is consistent with our analysis of mentors' accounts (Hardy & Parent, 1999b), wherein these individuals saw their role in training interns as going unrecognized by their employer, and themselves as failing to benefit from any lightening of their workload that would allow them to supervise their students. Finally, let us note that some students reproach the teacher who visits them for being insufficiently available, for not helping the students enough and for cutting visits too short or failing to visit at all. This last comment calls into question teachers' training with respect to the work-based training of their students and the recognition of this function within their job description. Teaching representatives, however, condemn the lack of time accorded teachers to guide their internship students.

These commentaries invite a reflection on current recognition for work-based training by the industrial and educational sectors. It seems, on the one hand, that some mentors and teachers would benefit from complementary training in the development of interns beginning their vocational training and, on the other hand, that the organizations and institutions involved ought to reorganize teachers and mentors' tasks to free up more time for them to devote to responding more adequately to the needs of students.

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